

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings of claims in the application:

**Listing of Claims:**

1. (Currently Amended) A removable dental positioning appliance comprising:
  - a polymeric shell in the shape of an arch having cavities shaped to receive and reposition teeth from a first orientation to a successive orientation;
  - a wire mounted on or embedded in the polymeric shell to span at least a portion of the arch of the polymeric shell; wherein the polymeric shell comprises at least one layer of polymeric material having a first state where the appliance is held onto the teeth and a second state where the appliance may be removed from the teeth.
2. (Original) A removable dental positioning appliance as in claim 1, wherein the wire is embedded in the polymeric shell.
3. (Original) A removable dental positioning appliance as in claim 1, wherein the wire is mounted on the polymeric shell.
4. (Currently Amended) A system for repositioning teeth from an initial tooth arrangement to a final tooth arrangement, said system comprising a plurality of dental incremental position adjustment appliances including:
  - a first appliance having a geometry selected to reposition the teeth from the initial tooth arrangement to a first intermediate arrangement;
  - one or more intermediate appliances having geometries selected to progressively reposition the teeth from the first intermediate arrangement to successive intermediate arrangements; and

a final appliance having a geometry selected to progressively reposition the teeth from the last intermediate arrangement to a successive tooth arrangement, wherein the appliances comprise polymeric shells having cavities in the shape of an arch, wherein the cavities of successive shells have different geometries shaped to receive and resiliently reposition teeth from one arrangement to a successive arrangement, wherein at least some of the polymeric shells have a wire mounted on or embedded in the polymeric shell to span at least a portion of the arch of the polymeric shell; and wherein at least one polymeric shell comprises at least one layer of polymeric material having a first state where the appliance is held onto the teeth and a second state where the appliance may be removed from the teeth.

5. (Original) A system as in claim 4, wherein the tooth positions defined by the cavities in each successive appliance differ from those defined by the prior appliance by no more than 2 mm.

6. (Original) A system as in claim 4, comprising at least two intermediate appliances.

7. (Original) A system as in claim 6, comprising at least ten intermediate appliances.

8. (Original) A system as in claim 7, comprising at least twenty-five intermediate appliances.

9-15. (Canceled)